CLAIMS:

1.   A computing system comprising at least one processor, associated memory, storage and input/output devices, said computing system being connected to a network of computing systems and being used to generate promotional scheme parameters for electronic coupons, including:

- means for automatically obtaining market demand data from defined sources of online auctions,

- means for conducting online auctions using defined parameters for specified goods and/or services for getting market information,

- means for storing and analyzing the data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons.

2.   A system as claimed in claim 1 wherein the means for obtaining demand data from online auction includes ability to access different types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

3.   A system as claimed in claim 2 wherein said means for obtaining the demand data from online auctions is through software means to start capturing the demand data from the time the auction starts to the time it ends.

4.   A system as claimed in claim 1 wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of

bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

5. A system as claimed in claim 1 wherein the demand data further includes the information specific to particular auction types such as the opening price and the successive decrements in case of descending ("Dutch") auctions.

6. A system as claimed in claim 1 wherein said means for storing and analyzing the demand data is a statistical means that generates the promotion scheme parameters for different market segments.

7. A system as claimed in claim 6 wherein said statistical means includes:

- means for estimating the market demand curve and the price elasticity for an auction item or product or service from a plurality of demand data sources, and

- means for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

8. A system as claimed in claim 6 wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme.

9.   A system as claimed in claim 7 wherein said means for estimating the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market willing to buy the product at zero price.

10. A system as claimed in claim 8 further comprising the means for suggesting the discounting of a substitute of the product or item or service being auctioned.

11. A system as claimed in claim 10 wherein said item being auctioned is a competitor's item and the substituted product is promoter's own.

12. A system as claimed in claim 2 wherein the means for obtaining the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments.

13. A system as claimed in claim 8 further including means for suggesting discounting of a cross selling or an up selling product to the product being auctioned.

14. A system as claimed in claim 9 wherein said means for estimating the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used.

15. A system as claimed in claim 9 wherein said means for estimating the market demand curve for an individual item uses demand data where multiple units of items are auctioned.

16. A system as claimed in claim 7 wherein said means for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels.

17. A system as claimed in claim 9 wherein said means for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction.

18. A system as claimed in claim 1 further including means for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

19. A system as claimed in claim 6 wherein said means for storing and analyzing the demand data also receives the data from the electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve the promotional parameter estimation system.

20. A method for generating promotional scheme parameters using electronic coupons, characterized in that it includes:
   - automatically obtaining market demand data from defined sources of online auctions,
   - conducting online auctions using defined parameters for specified

goods and/or services,

- storing and analyzing the market demand data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons.

21. A method as claimed in claim 20 wherein obtaining demand data from online auction includes ability to access different types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

22. A method as claimed in claim 21 wherein obtaining the demand data from online auctions is through software to start capturing the demand data from the time the auction starts to the time it ends.

23. A method as claimed in claim 20 wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

24. A method as claimed in claim 20 wherein the demand data further includes the information specific to particular auction types such as the opening price and the successive decrements in case of descending ("Dutch") auctions.

25. A method as claimed in claim 20 wherein storing and analyzing of the demand data is by a statistical method that generates the promotion scheme

parameters for different market segments.

26. A method as claimed in claim 25 wherein said statistical method includes:

- estimating the market demand curve and the price elasticity for an auction item or product or service from a plurality of demand data sources, and

- determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

27. A method as claimed in claim 25 wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme.

28. A method as claimed in claim 26 wherein estimating of the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market willing to buy the product at zero price.

29. A method as claimed in claim 27 further comprising suggesting the discounting of a substitute of the product or item or service being auctioned.

30. A method as claimed in claim 29 wherein said item being auctioned is a competitor's item and the substituted product is promoter's own.

31. A method as claimed in claim 21 wherein obtaining of the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments.

32. A method as claimed in claim 27 further comprising suggesting discounting of a cross selling or an up selling product to the product being auctioned.

33. A method as claimed in claim 28 wherein estimating of the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used.

34. A method as claimed in claim 28 wherein estimating of the market demand curve for an individual item uses demand data where multiple units of items are auctioned.

35. A method as claimed in claim 26 wherein estimating of market demand curve uses the quantity demanded by an individual buyer at various price levels.

36. A method as claimed in claim 28 wherein estimating of the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction.

37. A method as claimed in claim 20 further including method for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

38. A method as claimed in claim 25 wherein storing and analyzing the demand data also receives the data from the electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve the promotional parameter estimation system.

39. A computer program product comprising computer readable program code stored on computer readable storage medium embodied therein for causing a computer to generate promotional scheme parameters using electronic coupons comprising:
    - computer readable program code means configured for automatically obtaining market demand data from defined sources of online auctions,
    - computer readable program code means configured for conducting online auctions using defined parameters for specified goods and/or services,
    - computer readable program code means configured for storing and analyzing the data obtained from said online auctions or said conducted auctions to estimate demand and calculate promotion scheme parameters for issue of redeemable electronic coupons.

40. A computer program product as claimed in claim 39 wherein said computer readable program code means configured for obtaining demand data from online auction includes ability to access different types of auctions such as sealed-bid auctions, open-cry auctions, Dutch auctions and reverse auctions.

41. A computer program product as claimed in claim 40 wherein said computer readable program code means configured for obtaining the demand data from online auctions is through software to start capturing the demand data from the time the auction starts to the time it ends.

42 A computer program product as claimed in claim 39 wherein the demand data comprises of the names of products or services being auctioned, the bids from a plurality of bidders participating in an auction, the reserve prices of the auction, the duration of the auction, the total number of bids received for each product or service, market segment of the bidders.

43. A computer program product as claimed in claim 39 wherein the demand data further includes the information specific to particular auction types such as the opening price and the successive decrements in case of descending ("Dutch") auctions.

44. A computer program product as claimed in claim 39 wherein said computer readable program code means configured for storing and analyzing the demand data is a statistical computer readable program code means that generates the promotion scheme parameters for different market segments.

45. A computer program product as claimed in claim 44 wherein said statistical computer readable program code means includes:
- computer readable program code means configured for estimating the market demand curve and the price elasticity for an auction item or

product or service from a plurality of demand data sources, and

- computer readable program code means configured for determining if an item or product or service is amenable to price discrimination based on said estimated demand curve and price elasticity.

46.   A computer program product as claimed in claim 44 wherein said promotion scheme parameters include the collection of items or products or services to be discounted, the amount of discount, the nature of discount, market segment for the promotion scheme, duration of promotion scheme and identification of methods of offering the scheme.

47.   A computer program product as claimed in claim 45 wherein said computer readable program code means configured for estimating the market demand curve is by considering the fractional demand at a particular price, the fraction of population that is willing to pay the price, computing the product of the fractional demand and the demand at zero price i.e. the size of the market willing to buy the product at zero price.

48.   A computer program product as claimed in claim 46 further comprising computer readable program code means configured for suggesting the discounting of a substitute of the product or item or service being auctioned.

49.   A computer program product as claimed in claim 48 wherein said item being auctioned is a competitor's item and the substituted product is promoter's own.

50. A computer program product as claimed in claim 40 wherein the computer readable program code means configured for obtaining the demand data includes the ability to cover multiple market segments and suggest a promotion scheme targeted at different market segments.

51. A computer program product as claimed in claim 46 further including computer readable program code means configured for suggesting discounting of a cross selling or an up selling product to the product being auctioned.

52. A computer program product as claimed in claim 47 wherein said computer readable program code means configured for estimating the demand curve uses the winning bid and the highest bids of all the bidders for the case of open-cry or ascending auctions while for the descending auctions namely, Dutch auctions only the winning bid is used.

53. A computer program product as claimed in claim 47 wherein said computer readable program code means configured for estimating the market demand curve for an individual item uses demand data where multiple units of items are auctioned.

54. A computer program product as claimed in claim 45 wherein said computer readable program code means configured for estimating market demand curve uses the quantity demanded by an individual buyer at various price levels.

55. A computer program product as claimed in claim 47 wherein said computer

readable program code means configured for estimating the market demand curve information from the online auctions is used to determine the decrement size in a descending or Dutch auction.

56.   A computer program product as claimed in claim 39 further including computer readable program code means configured for the user to configure the sources of online demand data as well as the parameters for conducting online auctions on a plurality of products on specified URLs.

57.   A computer program product as claimed in claim 44 wherein said computer readable program code means configured for storing and analyzing the demand data also receives the data from the electronic coupon issuing system as a feedback in order to dynamically learn, adapt and improve the promotional parameter estimation system.

58.   A system as claimed in claim 1 wherein the system is extended to learn about the state of online markets by mining information from current and past operations of similar online markets in order to devise differential strategies for various market segments.

59.   A system as claimed in claim 1 wherein said system is also used to provide for implementing optimal inventory management.

60.   A system as claimed in claim 1 wherein the said system is integrated with an online electronic coupon generation system to provide a complete system for issuing of redeemable electronic coupons.

61. A system as claimed in claim 1, wherein the said generated market demand curve and promotion parameters are used to provide a data discovery service to a plurality of buyers in various market segments who use it for generating redeemable electronic coupons for their products or services.